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Berenbaum 9-4-5-5

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application

Applicants(s): Alan David Berenbaum,
Nevin Heintze,
Tor E. Jeremiassen and
Stefanos Kaxiras
Case: 9-4-5-5
Serial No.: 09/538,755
Filing Date: March 30, 2000
Group: 2782
Examiner: Unassigned

I hereby certify that this paper is being deposited on this date with the U.S. Postal Service as first class mail addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231

Signature Linda Hochleiter Date: September 21, 2001

Title: Method and Apparatus for Splitting Packets in a Multithreaded VLIW Processor

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TRANSMITTAL OF FORMAL DRAWINGS

Assistant Commissioner for Patents
Washington, D.C. 20231

Attention: Official Draftsperson

SIR:

Applicants submit herewith six (6) sheets of formal drawings in the above-referenced application.

Respectfully submitted,

Kevin M. Mason

Date: September 21, 2001

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09/538755

FIG. 1
PRIOR ART

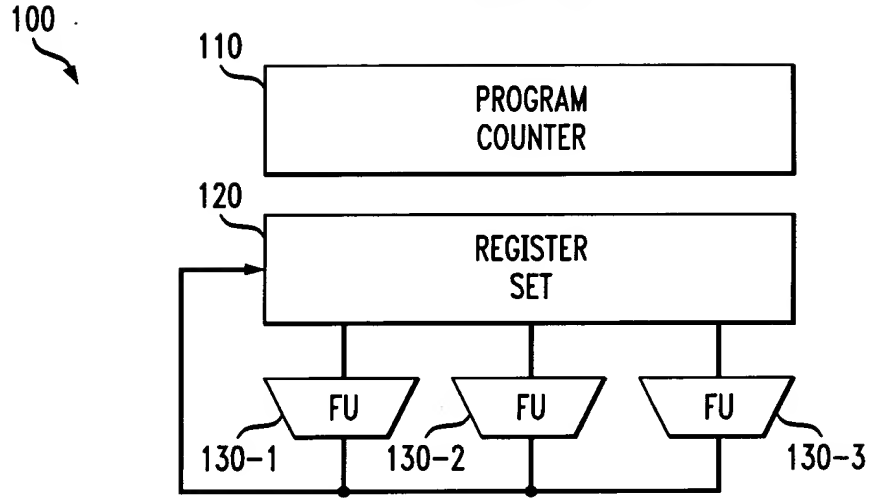

FIG. 2
PRIOR ART

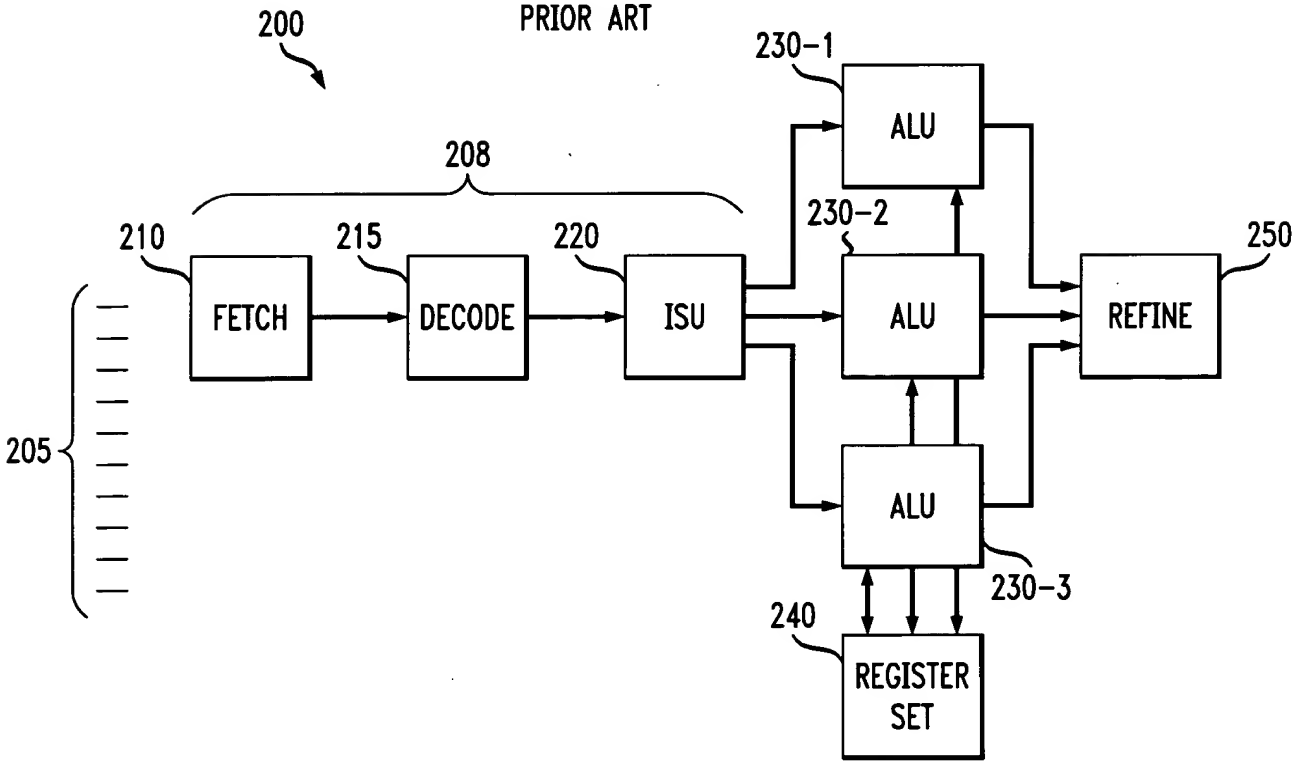

FIG. 3

```
310 {  L3:  ADD  R0,  R1,  R2
       L2:  SUB  R3,  R4,  R2
       L1:  OR   R6,  R1,  R5
```

FIG. 4
PRIOR ART

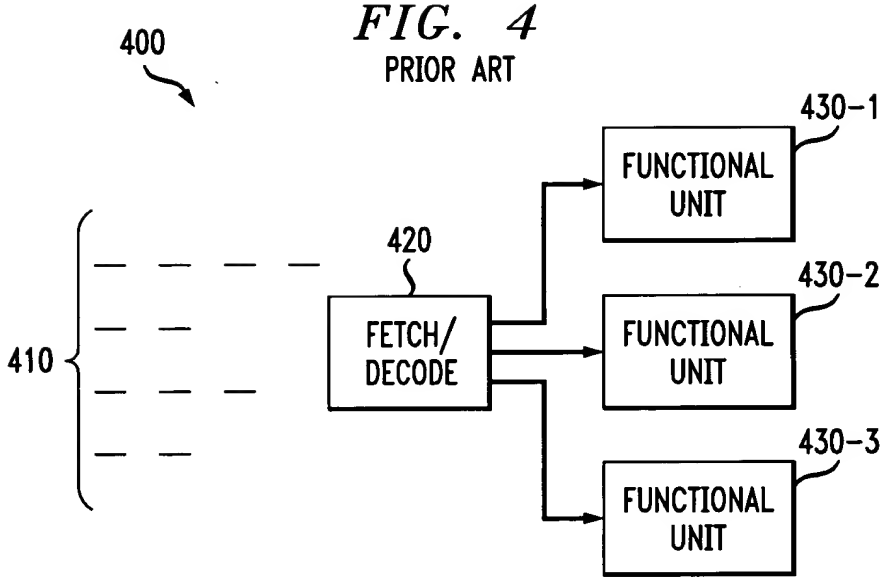

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FIG. 5
PRIOR ART

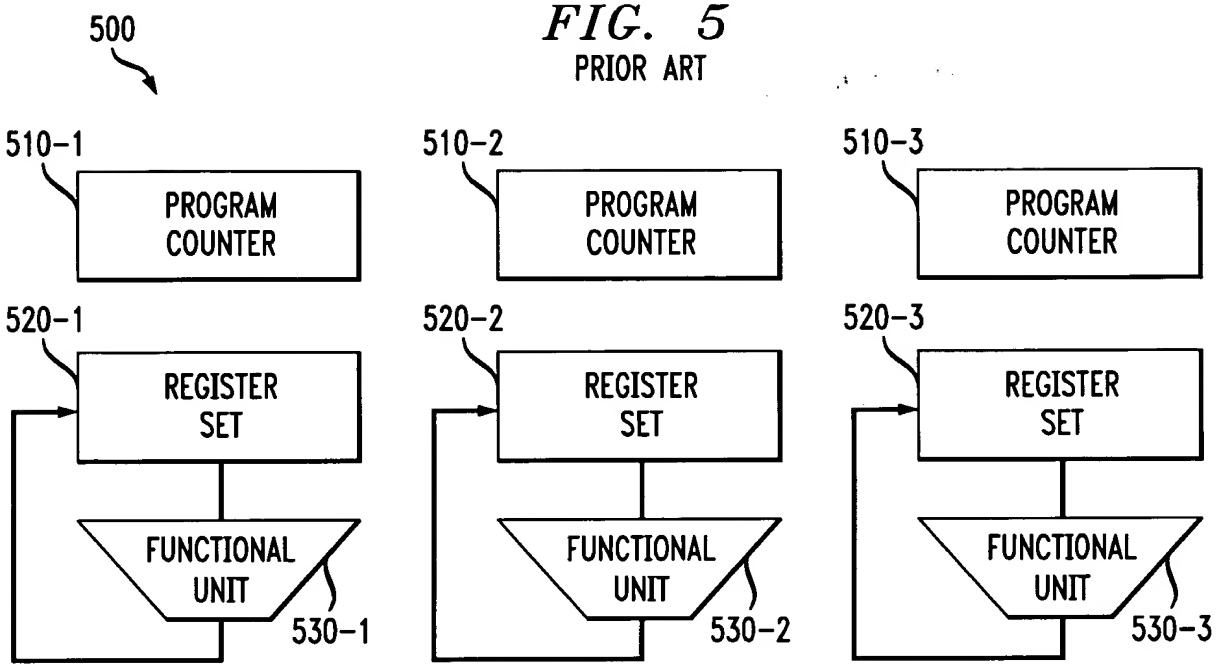

FIG. 6

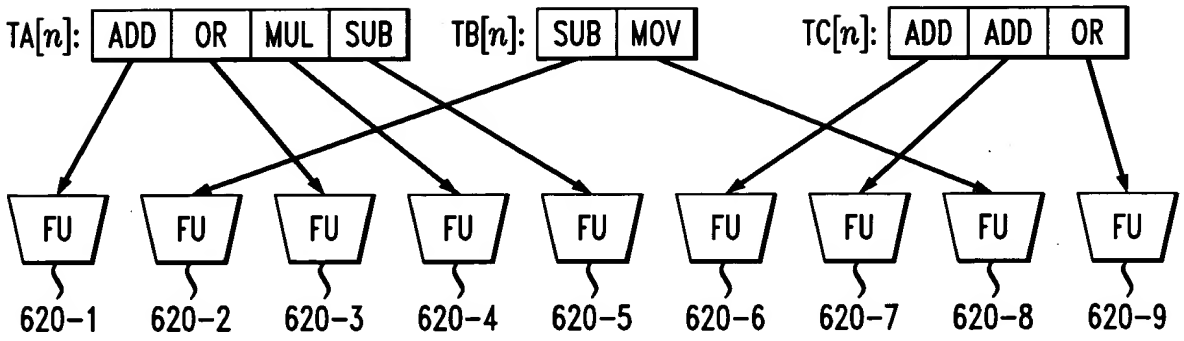

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FIG. 7A
PRIOR ART

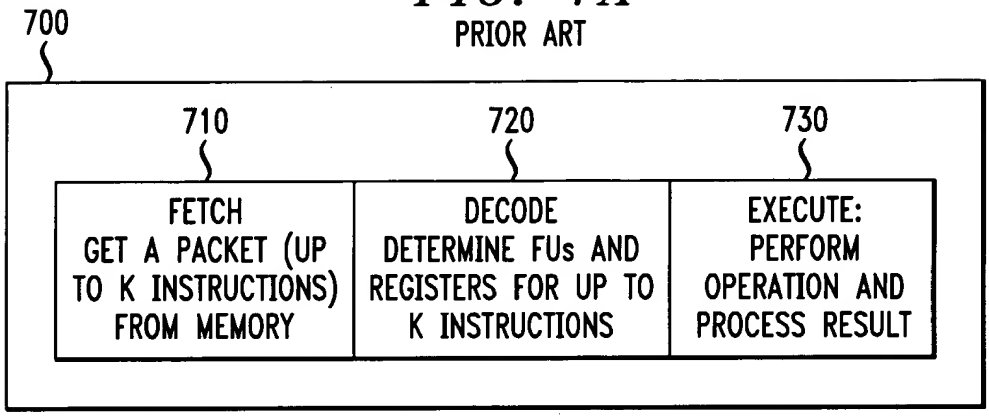

FIG. 7B

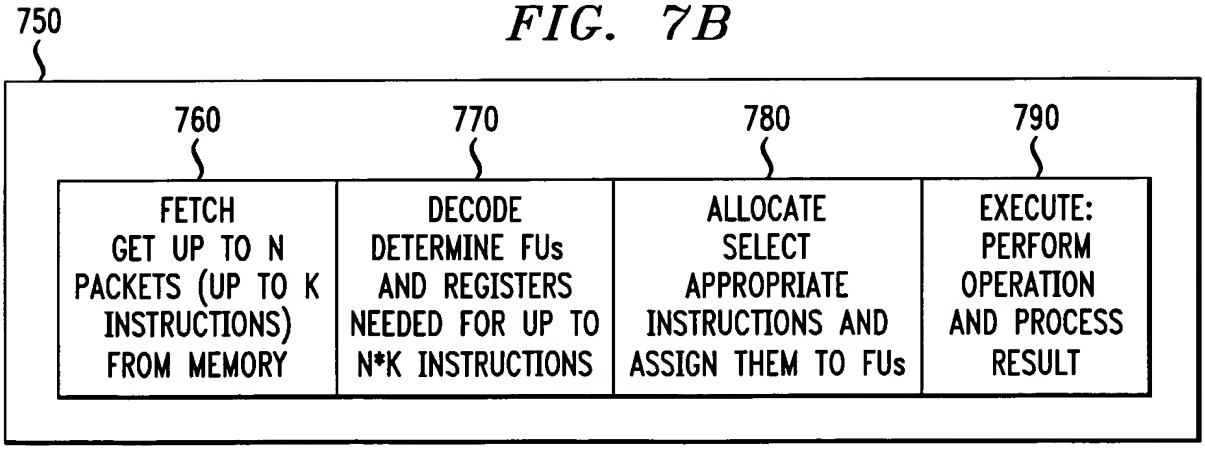

FIG. 8

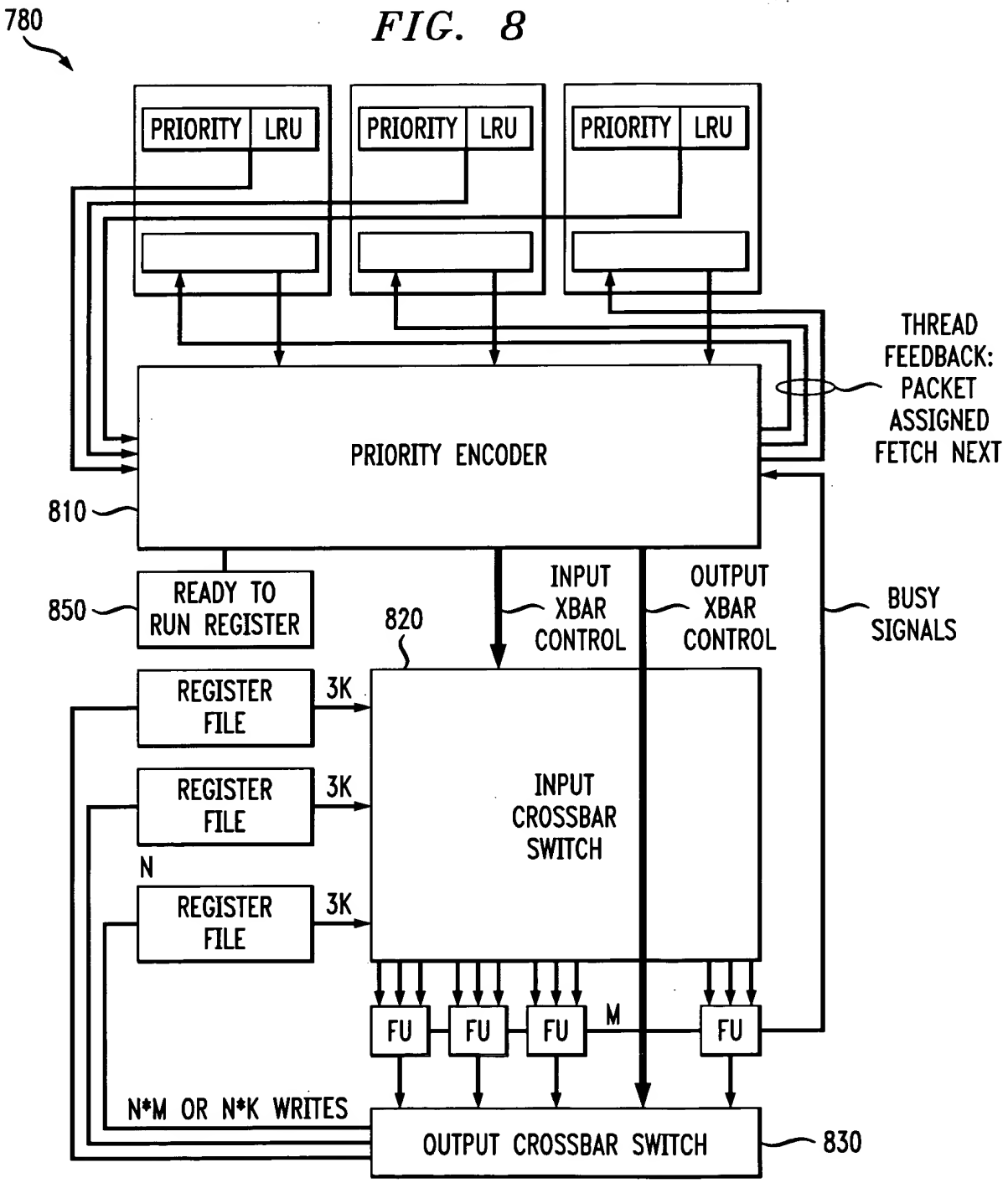
780
PRIORITY
LRU
PRIORITY
LRU
PRIORITY
LRU
THREAD FEEDBACK: PACKET ASSIGNED FETCH NEXT
PRIORITY ENCODER
810
READY TO RUN REGISTER
850
820
INPUT XBAR CONTROL
OUTPUT XBAR CONTROL
BUSY SIGNALS
REGISTER FILE
3K
REGISTER FILE
3K
INPUT CROSSBAR SWITCH
N
REGISTER FILE
3K
FU
FU
FU
M
FU
N*M OR N*K WRITES
OUTPUT CROSSBAR SWITCH
830

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FIG. 9

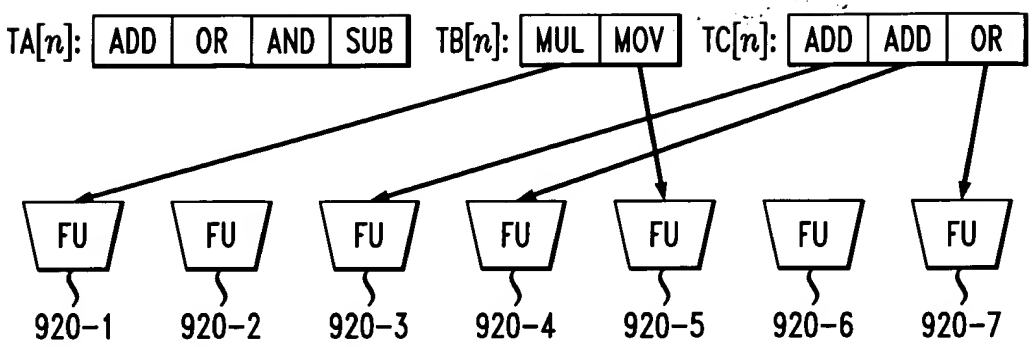

FIG. 10A

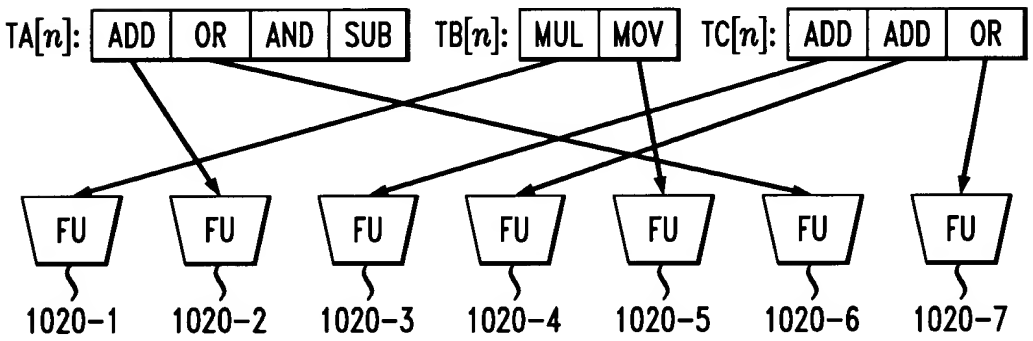
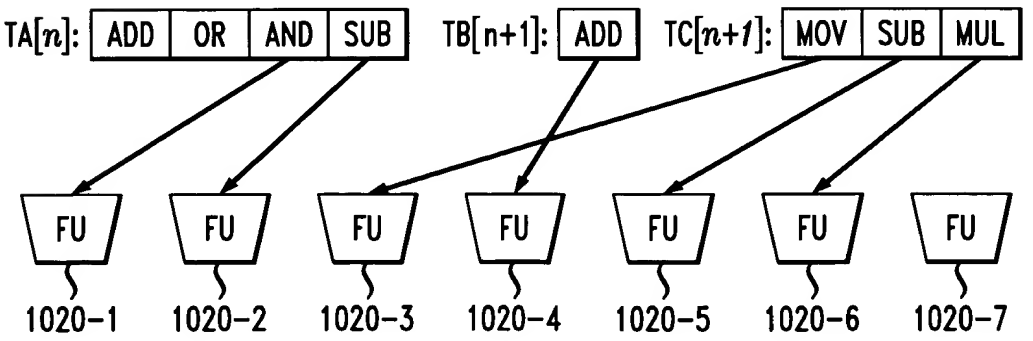
FIG. 10B